CALCULATION OF THE ACTUAL COST IN THE CHEMICAL FERTILIZER INDUSTRY

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Abstract: The main goal of the research is to present a way of organising the managerial accounting of totally and semi finished product obtained in chemical fertilizer industry entities. For this study, we analyzed the current principle of managerial accounting to an entity in the studied area, in order to emphasize the need of organizing and implementing a modern accounting management to control the cost and increase the performance of the entities in this area, starting from the premise that there are sufficient similarities between entities in the field. The research has highlighted the fact that, nowadays, the cost calculation is organized using traditional methods, which focus on the monthly determination of the actual unit cost per product (semi-fabric) and that it is necessary to organize and implement a managerial accounting, based on the use of a modern method, namely the standard cost method combined with cost centre method. The major implications of the proposed system for the researched field are the monthly calculation of actual costs per cost centres, the calculation of the actual cost per product, as the final cost carrier, to be performed over longer periods of time, usually, quarterly.

JEL classification: M41, M49

Key words: actual cost, cost centre calculation, product calculation, cost centres productive, cost related centres

1. INTRODUCTION

Relevant and performing decision making is influenced predominantly by the quality of information provided to the managers, and timeliness with which they are transmitted.

Traditional methods of calculation currently used by entities in the chemical fertilizer industry, those being the comprehensive method and the phased method, present a series of drawbacks, including historical character, lack of efficiency and foresight.

Given that entities in the chemical fertilizer industry operate today in a competitive market where prices are determined by the ratio of supply and demand, and mastering costs is one of the factors that can ensure the achievement of targeted performance, that this will require the introduction of a system of managing through costs, which aims to provide operational and relevant economic information to the management process at the level of the analyzed entities.

2. OBJECTIVES

A modern management of economic activity opposes, among other things, the accuracy of the late determined indicators, their operability even at the risk of approximations, as well as a permanent control of the cost of production on cost centers as centers of responsibility by measuring the results of the activity carried out at those centers.

These requirements, as well as rationalizing the calculation by giving up the monthly cost-per-product cost calculation in favour of cost center calculations at the level of direct expenditure supports its more pronounced orientation in relation to the particularities of the technology and organization of the entity's production. Compared to other sectors of activity, we believe that in the chemical fertilizer industry, which has a mass production, the cost center calculation wins. This is not to be understood in absolute terms, as it is necessary to have a number of prerequisites for organizing the cost center calculation.

The two calculations - on cost and product centers - should not be opposed to each other, both of which are necessary to determine the cost of final cost carriers, and the latter is deducted from the former. What distinguishes them is the amount of time each of them takes, and the scope, the cost centers calculation for all production and not just the production of goods, as is the case with the product calculation.

3. METHODOLOGY

To carry out this study, we analyzed the current conception concerning the organization of managerial accounting for the entities from the industry of chemical fertilizers. The main methods of research used for performing the scientific demarche were of analyze and synthesis and also of qualitative research. The information about this subject were get by studying the specialized literature in our country and aboard, by analyzing the legislation in force afferent to this domain.

4. CALCULATION OF ACTUAL COSTS BY COST CENTRES

A modern management of economic activity opposes, among other things, the accuracy of the late determined indicators, their operability even at the risk of approximations, as well as a permanent control of the cost of production on cost centers as centers of responsibility by measuring the results of the activity carried out at those centers.

These requirements, as well as the rationalization of production expenditure and cost calculation, can be achieved in chemical fertilizer industry entities by calculating monthly cost-effective costs per cost center, calculating the actual cost per product as the final cost carrier, are performed over longer periods of time, typically, quarterly.

Rationalizing the calculation by giving up the monthly cost-per-product cost calculation in favour of cost center calculations at the level of direct expenditure supports its more pronounced orientation in relation to the particularities of the technology and organization of the entity's production. Compared to other sectors of activity, we believe that in the chemical fertilizer industry, which has a mass production, the cost center calculation wins. This is not to be understood in absolute terms, as it is necessary to have a number of prerequisites for organizing the cost center calculation.

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For the monthly settlement, appreciation and control of the activity carried out on cost centers, the total and unit costs must be known in each of the centers.

In this context, the total expenditure shall be calculated by adding up the expenditure collected on the calculation items at the center concerned.

For example, cost centers only account for direct costs to the center, i.e. including maintenance and operation costs of the machine; at the related cost centers that are set up at the level of the department are considered only the general expenses of the department, developed on expenses articles, etc. Exceptions are made by the cost centers set up in the auxiliary workshops with varied production, where, for production centers, they are taken into account as direct expenses, those included in the calculation items used at the same centers within the main sections, except the maintenance and operation costs of the equipment ; these are taken into account at the related cost centers at the level of the workshop, since the general expenses of the section are taken into account at the related centers established at the level of the section.

For the unit costs of the cost center, these are determined by reporting the total expenditure to the production quantity obtained from that center, expressed in natural or equivalent units, using the following calculation relation:

$$Cu = \sum_{i=1}^{n} Ch_i \, / \, Q \qquad (1)$$

Where:
Cu = unit cost of the cost center;
Ch = total costs of the cost center;
Q = the amount of production obtained at that cost center;
i = calculating items.

Measuring the unit cost achievements of the cost center can also be done by applying a variant of the T.H.M. It implies the reporting of the total material expenses, the quantity of manufactured products, plus the processing costs per unit of product, calculated in relation to the number of hours of operation of the plant. For the calculation of unit processing costs, the total processing costs, the number of hours of operation of the installation and the total expenditure per hour of processing are reported. These are multiplied by the time consumed per unit of product, calculated by reporting the total number of hours of operation to the resulting product quantity, and so the unitary processing costs are known.

Although in both variants the final result is the same, the application of the first method has the advantage that it greatly simplifies the calculations. There are also two variants which, although complicating the calculations, make it easier to obtain results when a cost center obtains more products but not in a simultaneous production process, such as the ammonium nitrate / ammonium nitrate plant, e.g. This option can also be used for production cost centers on assortments, such as liquid fertilizer and fertilizer plants, if

production is not performed simultaneously. However, if at these cost centers the achievements can not be expressed unitarily by the time factor (plant operating hours), and the assortments made differ only by concentration, they can be used for settlement and quantitative units. Expenditure of the Center may be settled in this case, depending on the total quantity manufactured, converted into equivalent units.

The calculation of expenditure on centers for settlement purposes can be done methodologically, respecting a set of stages, traversed in a well-defined order of inheritance. Thus, the expenses of the centers set up for auxiliary activities are calculated first and only the expenses of the centers set up for the other basic activities, administration and management and sales are calculated. This order of succession is determined by the fact that the expenses incurred by the ancillary activities are, from the point of view of the calculation, as expenditure items either at the level of the cost centers set up for the basic activity or at the level of the cost centers set up for the other activities of the entity, depending on the intended use of the products, works and services provided by ancillary activities.

In connection with the calculation of expenditure on centers set up for ancillary activities, the following steps must be taken:

- Establishing production consumed for its own needs and settling it;

- Settlement of reciprocal benefits between auxiliaries;

- Calculation of the unit cost of the cost centers set up for the auxiliary departments.

With regard to the first two stages, the problem is solved by methods known and widely presented in the literature[1], with the particularities required by the cost centers calculation.

Regarding the calculation of the unit cost of the cost centers set up for the auxiliary departments, the problem is solved differently, depending on whether it is a productive or related cost center, and in the case of production centers, depending on the character of the production obtained.

Thus, in the case of homogeneous production sections, all costs are direct to the production center, where the unit cost is determined by the general model of calculation presented above.

In the case of departments with heterogeneous production, not all costs are direct in relation to the output produced, which leads to the distribution of those indirectly based on a unit of work characteristic of the activity (hours-workers or machine hours), resulting in the following calculation model of unit cost:

$$\sum_{i=1}^{n} Chr_i^{ind}$$

$$n \qquad dir$$

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1 Călin Oprea, Man Mariana, Nedelcu Monica – Viorica - Managerial Accounting, Teaching and Pedagogical Publishing House R.A., Bucharest, 2008, pp. 53-60; Iacob C., Ionescu I. & Goagără D. - Management Accounting in line with International Practice, Universitaria Publishing House, Craiova, 2007, pp. 56-62.

$$Cu = \dfrac{\sum\limits_{i=1} Chr_i + \dfrac{}{Or} \times Op}{Q} \qquad (2)$$

Where:

Cu = the unit cost of the cost center;

Chr = expenditures related to the created productive center;

Or = total hours of workers or machine hours at the level of the productive center;

Op = hours of workers or machine hours related to the product for which the unit cost is calculated;

Q = the quantity of product produced for which the unit cost is determined;

i = calculating items;

dir = direct expenditure on the product;

ind = indirect costs to the product;

In the case of related cost centers, the assessment of the activity is done by calculating the total actual costs resulting from the summation of the calculation items and their comparison with the standard ones.

After the cost calculation has been calculated on the cost centers set up for ancillary activities, the actual costs are calculated on the cost centers set up for the core business.

For this purpose, it is first to settle the output delivered by the auxiliary departments to the basic sections, which is different depending on the character of the production.

Thus, in the case of ancillary production units with homogeneous production, for the settlement of the cost of the works and services delivered by them to the basic activity, it is necessary first to allocate the expenses related to the related centers at the level of the department to the production centers, using the supplementation procedure.

The share of expenditures (C) to be settled to the basic sections is determined according to the relationship:

$$C_j = \dfrac{\sum\limits_{k=1}^{n} Chr_k + \dfrac{\sum\limits_{i=1}^{n \quad s} Chf_i}{B}}{Q} \times q_j \,,$$

(3)

Where:

Chr = costs related to the production center:

Chf = costs related to the related site;

k = production cost center;

j = the beneficiary base section;

i = items of expenditure;

s = section;

B = basis of distribution;

Q = the total quantity of production achieved;

q = the amount of production settled.

In the case of the auxiliary workshops with heterogeneous production, for the settlement of the works and services delivered to the basic sections, it is necessary first to allocate the costs related to the related workshop level and then to the related sections at the level of the section, to the productive centers using the procedure supplement.

The calculation relation for the share of expenditures to be settled on the beneficiary base section is prezented in equation (4).

By applying this methodology for the settlement of expenses from ancillary departments, starting from the cost center calculation, the cost of product costing stage is removed as an accounting settlement amount and a performance indicator, which leads to the simplification and rationalization cost calculation.

$$C_j = \frac{\sum\limits_{k=1}^{n^c} Chr_k + \dfrac{\sum\limits_{g=1}^{n^{at}} Chf_g}{B^{at}} + \dfrac{\sum\limits_{i=1}^{n^s} Chf_i}{B^s}}{\sum\limits_{k=1}^{n} q_k^c} \times q_j^c \,, \qquad (4)$$

Where

c = the order;

at = atelier;

g = number of related cost centers.

The rest of the notations have the same meaning as above.

After determining the costs related to the production provided by the auxiliary departments of the cost centers, the accounting for the settlement of the respective production shall be carried out by debiting the accounts which reflect the cost centers, namely: 921 *"Basic Business Expenditures"*, 923 *"Indirect Production Expenses"*, 924 *"General Administration Expenditures"*, as appropriate, and crediting of account 922 *"Expenditure on Ancillary Activities"*, Analytical Center of Costs Provider. This settlement is made at the cost of production, thus without the allocation of the general administrative expenses share.

In relation to the calculation of actual expenditure on the cost centers set up for the core business, the same calculation principles are used as for the cost centers set up in the ancillary activities. What is more, it is the issue of homogenizing the output produced from each cost center by means of equivalent units when it is not homogeneous.

5. CALCULATION OF ACTUAL COST PER PRODUCT

Although one of the major principles of modern management is to determine production costs by cost centers, however, periodically, the costing of the product has to be calculated as a costing stage starting from cost centers.

In chemical fertilizer entities, we believe that this should be done quarterly, in the current, and annual, period of economic stability.

Under modern economy conditions, management has to serve an economic goal by calculating the actual cost per product: controlling yields and choosing the optimal option in programming, thus becoming a basic element for substantiating decisions.

When determining the actual cost per product, the same methodological principles used to develop the standard product calculation are followed[2].

Thus, with regard to the core business, after performing all the indirect cost allocation operations, the flow of the analysts' account 921 "Base Expenditures", opened on each plant at the end of the quarter, collects all costs incurred in manufacturing production.

With regard to the particularities imposed on the calculation technique by the number of products obtained from each installation, it should be noted that in the chemical fertilizer industry, the following phases of manufacture may result:

- one main product and one or more by-products (recoverable and reusable materials);

- only main products, with no by-products;

- one single product differentiated on multiple varieties and one or more by-products (recoverable and reusable materials).

The manufacture of these products, known as simultaneous, coupled or associated products, is unitary and is organically related to some of the total production costs.

In order to be able to separate from the total costs of each product and calculate its cost it is necessary to know which of the products is the main one and which is secondary one; this is determined by the importance of the products in the entity.

The unit cost calculation is then made in relation to the number, character and importance of the products using the following procedures: quantitative process, equivalence process, product equivalence process, value deduction process[3].

This methodology is retained in the proposed calculation system, but based on cost center calculations, with a distinct follow-up of standard expenditures and deviations from these costs. It is also complemented by the methodology for the distribution of indirect costs presented in the literature[4].

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[2] Ionescu I. - Standard Product Calculation in the Chemical Fertilizer Industry, Annals of the University of Craiova, Economic Sciences Series, no. 44, vol. 1, 2016, pp. 91-100.

[3] Călin Oprea, Man Mariana, Nedelcu Monica – Viorica - Managerial Accounting, Teaching and Pedagogical Publishing House R.A., Bucharest, 2008, pp. 61-76; Iacob C., Ionescu I. & Goagără D. - Management Accounting in line with International Practice, Universitaria Publishing House, Craiova, 2007, pp. 83-91.

[4] Ionescu I. - Standard Product Calculation in the Chemical Fertilizer Industry, Annals of the University of Craiova, Economic Sciences Series, no. 44, vol. 1, 2016, pp. 91-100.

In this context, we will further exemplify the calculation of the total and unitary cost in the case of a manufacturing process in which only the main products are produced, with no by-products.

In the chemical fertilizer industry, this situation is met at the cost center "Ammonium nitrate / calcium ammonium nitrate plant" where the main products are obtained in successive stages: ammonium nitrate, 34,5% N2, expressed 100% N2, and ammonium nitrate, 27% N_2 concentration, expressed as 100% N_2.

The actual cost of the two products is determined from the cost centers calculation (Table no. 1), stating that for the sake of simplicity it is considered that the data in these calculations relate to the activity carried out over a quarter.

Firstly, calculations are made for the distribution of costs on production cost centers on the two manufactured products as follows:

- expenditure recorded in the calculation items: "direct auxiliary materials"; "semi-finished products" and "technological utilities" shall be individualized for each of the two products, depending on the quantity of actual production actually produced, unit-specific consumption and unit costs;

- the following allocation coefficients were taken into consideration when determining the transport costs: standard, 18%; actually, 20%;

- for the other items of calculation, the costs are indirect in relation to the two products manufactured, for which reason part of the products is distributed as follows, as follows.

Table no. 1

The actual calculation of the production cost center on the first quarter of year N

Code/Section name: 40.000 Ammonium nitrate

Code/Installation name: 40.100 Ammonium nitrate/Calcium ammonium nitrate

Calculation article code	Expenditures	Standard Expenses	Deviations	Actual costs
200	*Direct auxiliary materials*			
208	Polyethylene bags	416.843	-346.061	70.782
209	Flotigam		168.560	168.560
210	Sulfuric acid	19.763	-19.763	
211	Agero 100% s.a.	12.382	-12.382	
212	Diatomite	71.839	-71.839	
213	Dolomite	42.682	46.216	88.898
	Total direct auxiliary materials	563.509	-235.269	328.240
300	Expenses for transport - supply	101.432	-35.784	65.648
500	Semi-finished products of own products			
501	Ammonia	2.617.552	90.810	2.708.362
502	Nitric acid	3.881.566	114.236	3.995.802
	Total semi-finished products of own production	6.499.118	205.046	6.704.164
600	Technological utilities			
601	Electricity	71.320	-7.944	63.376
602	Recirculated water	31.679	-8.372	23.307

604	Thermal energy	309.205	-50.694	258.511
605	Condensed water	28.292	2.488	25.804
606	Methane gas	1.552	52	1.604
	Total technological utilities	442.048	-69.446	372.602
800	Direct wages	68.894	18.092	86.986
900	CAS (Health Insurance Fund), CASS and Unemployment Direct Payroll Fund	27.558	7.236	34.794
1000	Expenditure on maintenance and operation of machinery	84.711	7.035	91.746
	Total installation	7.787.270	-103.090	7.684.180

The actual total direct salaries of 86.986.000 lei are distributed according to the actual hours of operation of the installation, which are as follows:

- For the production of ammonium nitrate   482 hours
- For calcium ammonium nitrate manufacture   107 hours
Total basis of assignment   589 hours

The extra pay factor is as follows:

$$K = 86.986.000 / 589 = 147.684 \text{ lei/hour} \qquad (5)$$

Share of direct salary for each product:
- Ammonium nitrate 482 x 147.684 = 71.184.000 lei
- Calcium ammonium nitrate 107 x 147.684 = 15,802,000 lei

Expenditures on social security contributions and the unemployment fund are determined by weighting the direct wages by 40%.

The expenses for the maintenance and operation of the equipment in the total amount of 91.746.000 lei (actual expenses 92.946.000 lei minus the deviation of the capacity of 1.200.000 lei), are distributed on the two products according to the number of actual hours of operation of the installation, as follows:

The supplementary factor will be:

$$K = 91.746.000 / 589 = 155.766 \text{ lei/hour} \qquad (6)$$

The share of equipment maintenance and operation costs for each product is:
- Ammonium nitrate 482 x 155.766 = 75.079.000 lei
- Calcium ammonium nitrate 107 x 155.766 = 16.667.000 lei

The general expenses of the ammonium nitrate section in the total amount of 110.782.000 lei (actual expenses minus the capacity depletion) are allocated according to the number of actual hours of operation of the installations in the department, which is presented as follows:

- For ammonium nitrate   482 hours
- For calcium ammonium nitrate   107 hours
- For liquid fertilizer   536 hours
Total basis of distribution   1.125 hours

The supplementary factor will be:

$$K = 110.782.000 \ / \ 1.125 \ = 98.473 \text{ lei/hour} \qquad (7)$$

The share of the general expenses of the section for each product is:
- Ammonium nitrate 482 x 98.473 = 47.464.000 lei
- Calcium ammonium nitrate 107 x 98.473 = 10.537.000 lei
- Liquid fertilizers 536 x 98.473 = 52.781.000 lei

The share of the general administrative expenses of each of the two products is determined by weighting the actual percentage of the distribution of these costs (0,80%) with the actual production cost, as follows:
- Ammonium nitrate 6.480.926.000 x 0,80% = 51.847.000 lei
- Calcium ammonium nitrate 1.261.255.000 x 0,80% = 10.090.000 lei

The packing costs in the total amount of 417.762.000 lei were allocated to the products according to the conventional quantity of packaged products, which is as follows:

- Urea	11.000 tons 100% N_2
- Ammonium nitrate	6.210 tons 100% N_2
- Calcium ammonium nitrate	1.080 tons 100% N_2
Total distribution base	18.290 tons 100% N_2

The supplementary factor will be:

$$K = 417.762.000 \ / \ 18.290 = 22.841 \text{ lei/ton} \qquad (8)$$

The share of the cost of the packaging plant for each product is:
- Ammonium nitrate 22.841 x 6.210 = 141.843.000 lei
- Calcium ammonium nitrate 22.841 x 1.080 = 24.668.000 lei

Once the indirect costs have been allocated to the two products produced at the ammonium nitrate/calcium ammonium nitrate plant by adding the share of these costs to the direct costs, the full total cost of each product is obtained.

Next, we determine the cost per unit of product manufactured by reporting the total cost to the quantity obtained from each product, the calculation being made on each individual calculation item and separately for the standard expenditure, deviations and expenses effective.

The calculation of the actual cost according to the methodology presented for the two products manufactured at the ammonium nitrate/calcium ammonium nitrate plant is shown in Tables no. 2 and no. 3.

6. CONCLUSIONS

Although one of the major principles of modern management is to determine production costs by cost centers, however, periodically, the costing of the product has to be calculated as a costing stage starting from cost centers.

In chemical fertilizer entities, we believe that this should be done quarterly, in the current, and annual, period of economic stability.

Under modern economy conditions, management has to serve an economic goal by calculating the actual cost per product: controlling yields and choosing the optimal option in programming, thus becoming a basic element for substantiating decisions.

By improving the cost calculation according to the methodology presented, the management's attention focuses only on the aspects that involve taking urgent decisions and ensures the management of the cost centers under the conditions of increased responsibilities and operatives.

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Table no. 2

Calculation of actual cost per product for Quarter I, Year N

Code/Section name: 40 000 Ammonium nitrate
Code/Installation name: 40 100 Ammonium nitrate/Calcium ammonium nitrate
Code/Product name: 14 000 Ammonium nitrate
Effective physical quantity: 18 000 tonnes
Effective equivalent quantity: 6 210 tonnes / year

Calculation article code	Expenditures	Total Expenditures (lei)			Unit Expenditures (lei)		
		Standard	Deviations	Actual	Standard	Deviations	Actual
200	*Direct auxiliary materials*						
208	Polyethylene bags	341.053	-285057	55.996	54.920	-45.903	9.017
209	Flotigam		143.588	143.588		23.122	23.122
210	Sulfuric acid	16.171	-16.171		2.604	-2.604	
211	Agero 100% s.a.	9.768	-9.768		1.573	-1.573	
212	Diatomite	60.324	-60.324		9.714	-9.714	
213	Dolomite	427.316	74.837	74.837		12.051	12.051
	Total direct auxiliary	427.316	-152.895	274.421	68.811	-24.621	44.190

	materials						
300	Expenses for transport - supply	76.917	-22.033	54.884	12.386	-3.548	8.838
500	Semi-finished products of own products						
501	Ammonia	2.183.324	72.651	2.255.975	351.582	11.699	363.281
502	Nitric acid	3.244.762	116.910	3.361.672	522.506	18.826	541.332
	Total semi-finished products of own production	5.428.086	189.561	5.617.647	874.088	60.525	904.613
600	Technological utilities						
601	Electricity	57.480	-6.415	51.065	9.256	-1.033	8.223
602	Recirculated water	25.126	-6.595	18.531	4.046	-1.062	2.984
604	Thermal energy	263.397	-43.221	220.176	42.415	-6.960	35.455
605	Condensed water	24.101	-2.099	22.002	3.881	-338	3.543
	Total technological utilities	370.104	-58.330	311.774	59.598	-9.393	50.205
800	Direct wages	56.368	14.816	71.184	9.077	2.386	11.463
900	CAS (Health Insurance Fund), CASS and Unemployment Direct Payroll Fund	22.547	5.926	28.473	3.631	954	4.585
1000	Expenditure on maintenance and operation of machinery	67.769	7.310	75.079	10.913	1.177	12.090
1100	General expenses of the section	49.639	-2.175	47.464	7.993	-350	7.643
	Standard production cost	6.498.746	-17.819	6.480.926	1.046.497	-2.870	1043627
1200	General administrative expenses	51.145	702	51.847	8.234	115	8.349
1300	Packaging costs	119.474	22.369	141.843	19.239	3.602	22.841
	Standard full cost	6.669.365	5.251	6.674.616	1.073.970	847	1074817

Table no. 3

Calculation of actual cost per product for Quarter I, Year N

Code/Section name: 40 000 Ammonium nitrate
Code/Installation name: 40 100 Ammonium nitrate/Calcium ammonium nitrate
Code/Product name: 15 000 Calcium ammonium nitrate
Effective physical quantity: 4 000 tonnes
Effective equivalent quantity: 1 080 tonnes / year

Calculation article code	Expenditures	Total Expenditures (lei)			Unit Expenditures (lei)		
		Standard	Deviations	Actual	Standard	Deviations	Actual
200	*Direct auxiliary materials*						
208	Polyethylene bags	75.790	-61.004	14.786	70.176	-56.485	13.691
209	Flotigam		24.972	24.972		23.122	23.122
210	Sulfuric acid	3.592	-3.592		3.326	-3.326	
211	Agero 100% s.a.	2.614	-2.614		2.420	-2.420	

212	Diatomite	11.515	-11.515		10.662	-10.662	
213	Dolomite	42.682	-28.621	14.061	39.520	-26.502	13.019
	Total direct auxiliary materials	136.193	-82.374	53.819	126.104	-76.273	49.832
300	Expenses for transport - supply	24.515	-13.751	10.764	22.699	-127.333	9.966
500	Semi-finished products of own products						
501	Ammonia	434.228	18.159	452.387	402.063	16.814	418.877
502	Nitric acid	636.804	-2.674	634.130	589.633	-2.476	587.157
	Total semi-finished products of own production	1.071.032	15.485	1.086.517	991.696	14.338	1.006.034
600	Technological utilities						
601	Electricity	13.840	-1.529	12.311	12.815	-1.416	11.399
602	Recirculated water	6.553	-1.777	4.776	6.068	-1.648	4.422
604	Thermal energy	45.808	-7.473	38.335	42.415	-6.901	35.514
605	Condensed water	4.191	-389	3.802	3.881	-361	3.520
	Total technological utilities	1.552	52	1.604	1.437	48	1.485
800	Direct wages	71.944	-11.116	60.828	66.616	-10276	56.340
900	CAS (Health Insurance Fund), CASS and Unemployment Direct Payroll Fund	12.526	3.276	15.802	11.598	3.034	14.632
1000	Expenditure on maintenance and operation of machinery	5.011	1.310	6.321	4.639	1.214	5.853
1100	General expenses of the section	16.942	-275	16.667	15.687	-255	15.432
	Standard production cost	12.410	-1.873	10.537	11.491	-1.735	9.756
1200	General administrative expenses	1.350.573	-89.318	1261255	1.250.531	-82.686	1167845
1300	Packaging costs	10.629	-539	10.090	9.842	-499	9.343
	Standard full cost	20.778	3.890	24.668	19.239	3.602	22.841